RECEIVED CENTRAL FAX CENTER MAY 2 7 2008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled).

2. (previously presented) A plant for multi-component liquid mixtures processing comprising a feeding pump (2), a head delivery main (3), a discharge main (4), control instrumentation (11, 12, 13, 14, 19) and a vacuum-generating device (5) comprising a horizontal vacuum chamber (1), wherein the vacuum-generating device (5) is implemented as a liquid-gas jet device (1, 5, 6, 7, 10) connected to the head main (3), a nozzle (6) of, which is integrated into a front end wall (7) of the vacuum chamber (1), having a length with respect to its cavity diameter meeting the equation

L= (7 to 10) * D, where:

L is the length of the vacuum chamber,

D is the diameter of the vacuum chamber cavity;

the plant further comprises a counterpressure regulator (8)

implemented so as to provide for, jointly with the liquid-gas jet device (1, 5, 6, 7, 10), formation of a pressure surge in the vacuum chamber and connected through a pipeline to a rear end

wall of the vacuum chamber (1), and a vacuum pressure gauge (11) connected to the vacuum chamber (1) in a front section of said vacuum chamber.

3. (previously presented) The plant according to the Claim 2, wherein the nozzle (6) has a length with respect to its diameter constituting

$$\frac{l_c}{d_c}$$
 = 1 to 5, where:

 $oldsymbol{l_c}$ is the nozzle length, $oldsymbol{d_r}$ is the nozzle diameter.

- 4. (previously presented) The plant according to Claim 2, wherein additionally connected to the head delivery main (3) between the feeding pump (2) and the liquid-gas jet device (1, 5, 6, 7, 10) are a flowmeter (12), a thermometer (13), and a pressure gauge (14).
- 5. (previously presented) The plant according to Claim 3, wherein additionally connected to the head delivery main (3) between the feeding pump (2) and the liquid-gas jet device (1, 5, 6, 7, 10) are a flowmeter (12), a thermometer (13), and a pressure gauge (14).

- (currently amended) A method for processing of multi-6. component liquid mixtures by vacuum distillation comprising pressure feeding a feed hydrocarbon liquid mixture to a nozzle of a liquid-gas jet device which comprises said nozzle and a vacuum chamber, said nozzle which discharges into said [[a]] vacuum chamber of said device, said feed hydrocarbon liquid mixture is pumped fed to said nozzle at a feed pressure of 1 to 12 Mpa which is generated by a pump, wherein due to vaporization of a part of said feed liquid mixture a two-phase supersonic flow is formed in said vacuum chamber, and then a counterpressure is generated which causes a pressure surge in said vacuum chamber with avalanche-like avalanche condensation therein of a gaseous component of said two-phase flow, said counterpressure is 0.4 to 0.7 of the magnitude of said feed pressure generated by said oump. . . .
- 7. (previously presented) The method of claim 6, wherein said feed hydrocarbon liquid mixture is a liquid petroleum mixture.